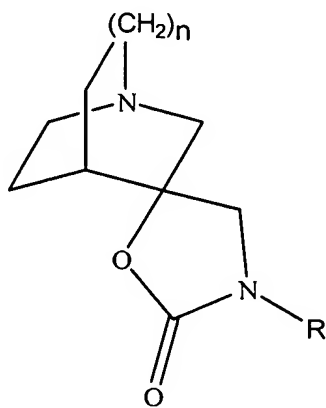


## Amendments to the Claims

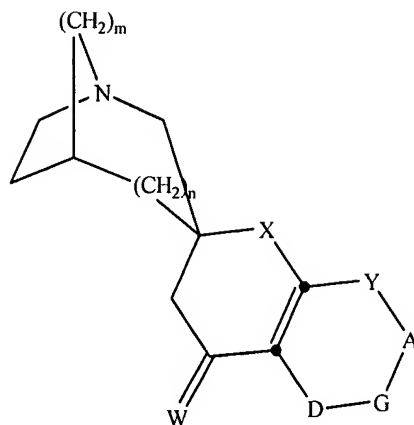
Please amend Claims 4, 6, 9-10 and 13-18. The Claim Listing below will replace all prior versions of the claims in the application:

**Claim Listing**

1. (Previously Presented) A method of treating a patient suffering from an inflammatory condition, comprising treating said patient with a therapeutically effective amount of a cholinergic agonist selective for an  $\alpha 7$  nicotinic receptor, wherein said condition is selected from the group consisting of peritonitis, sepsis, endotoxic shock, adult respiratory distress syndrome, chronic obstructive pulmonary disease, rheumatoid arthritis, systemic lupus erythematosus, allograft rejection, asthma, graft-versus-host-disease, congestive heart failure and cystic fibrosis.
- 2-3. (Cancelled)
4. (Currently Amended) The method of claim 1, wherein the cholinergic agonist is selected from the group consisting of a quaternary analog of cocaine; (1-aza-bicyclo[2.2.2]oct-3-yl)-carbamic acid 1-(2-fluorophenyl)-ethyl ester or a pharmaceutically acceptable salt thereof; a compound of formula I:



wherein, R represents hydrogen or methyl, and  
n represents 0 or 1; a pharmaceutically acceptable salt of a compound of formula I; a compound of formula II:



II

wherein:

m is 1 or 2,

n is 0 or 1,

Y is CH, N or NO,

X is oxygen or sulfur,

W is oxygen, H<sub>2</sub> or F<sub>2</sub>,

A is N or C(R<sup>2</sup>),

G is N or C(R<sup>3</sup>),

D is N or C(R<sup>4</sup>),

with the proviso that no more than one of A, G and D is nitrogen but at least one of Y, A,

G and D is nitrogen or NO,

R<sup>1</sup> is hydrogen or C<sub>1</sub>-C<sub>4</sub> alkyl,

R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are independently hydrogen, halogen, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>2</sub>-C<sub>4</sub> alkenyl,

C<sub>2</sub>-C<sub>4</sub> alkynyl, aryl, heteroaryl, OH, OC<sub>1</sub>-C<sub>4</sub> alkyl, CO<sub>2</sub>R<sub>1</sub>, -CN, -NO<sub>2</sub>, -NR<sub>5</sub>R<sub>6</sub>, -CF<sub>3</sub> or -

OSO<sub>2</sub>CF<sub>3</sub>, or R<sup>2</sup> and R<sup>3</sup>, R<sup>3</sup> and R<sup>4</sup>, respectively, may together form another six

membered aromatic or heteroaromatic ring sharing A and G, or G and D, respectively,

containing between zero and two nitrogen atoms, and substituted with one to two of the

following substituents: independently hydrogen, halogen, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>2</sub>-C<sub>4</sub> alkenyl, C<sub>2</sub>-

C<sub>4</sub> alkynyl, aryl, heteroaryl, OH, OC<sub>1</sub>-C<sub>4</sub> alkyl, CO<sub>2</sub>R<sup>1</sup>, -CN, -NO<sub>2</sub>, -NR<sup>5</sup>R<sup>6</sup>, -CF<sub>3</sub> or -OSO<sub>2</sub>CF<sub>3</sub>,

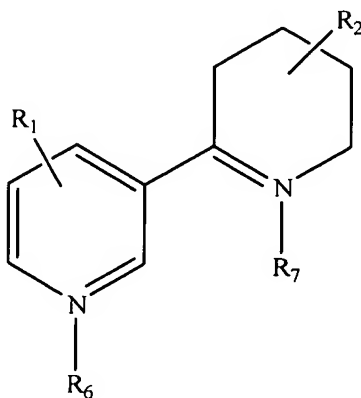
R<sup>5</sup> and R<sup>6</sup> are independently hydrogen, C<sub>1</sub>-C<sub>4</sub> alkyl, C(O)R<sup>7</sup>, C(O)NHR<sup>8</sup>, C(O)OR<sup>9</sup>, SO<sub>2</sub>R<sup>10</sup> or may together be (CH<sub>2</sub>)<sub>j</sub>Q(CH<sub>2</sub>)<sub>k</sub> where Q is O, S, NR<sup>11</sup>,

or a bond,

j is 2 to 7,

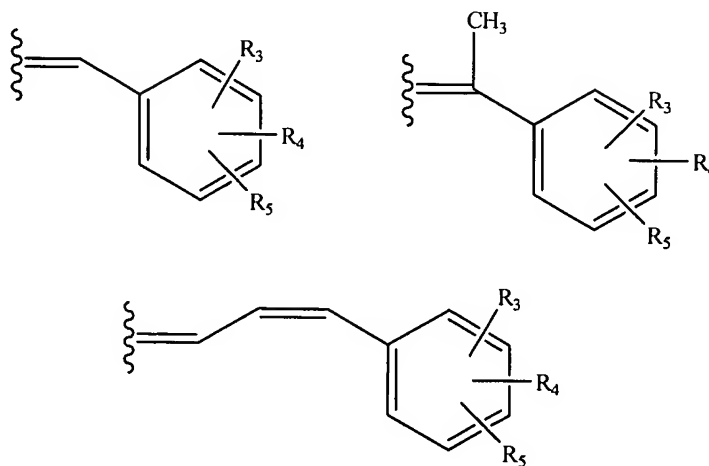
k is 0 to 2,

R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup> and R<sup>11</sup> are independently C<sub>1</sub>-C<sub>4</sub> alkyl, aryl, or heteroaryl, or an enantiomer thereof; a pharmaceutically acceptable salt of a compound of formula II; a compound of formula III:



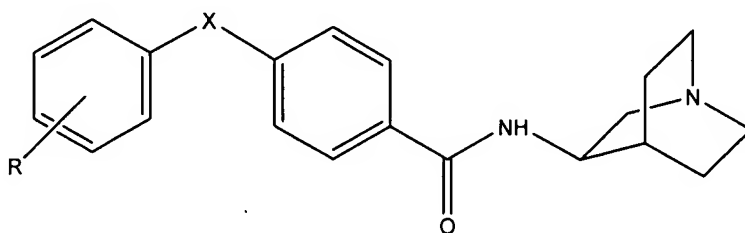
III

or a pharmaceutically acceptable salt thereof, wherein R<sub>1</sub>, R<sub>6</sub> and R<sub>7</sub> are hydrogen or C<sub>1</sub>-C<sub>4</sub> alkyl, and R<sub>2</sub> is selected from a group of



and

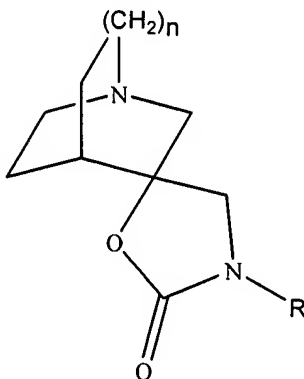
wherein,  $R_3$ ,  $R_4$  and  $R_5$  are selected from the group consisting of hydrogen,  $C_1$ - $C_4$  alkyl optionally substituted with N,N-dialkylamino having 1 to 4 carbons in each of the alkyls,  $C_1$ - $C_6$  alkoxy optionally substituted with N,N-dialkylamino having 1 to 4 carbons in each of the alkyls, carboalkoxy having 1 to 4 carbons in the alkoxy, amino, amido having 1 to 4 carbons in the acyl, cyano, and N,N-dialkylamino having 1 to 4 carbons in each of the alkyls, halo, hydroxyl or nitro; and a compound of formula IV:



IV

or a pharmaceutically acceptable salt thereof, wherein X is O or S, and R is selected from the group consisting of H,  $OR_1$ ,  $NHC(O)R_1$ , and a halogen, wherein  $R_1$  is a  $C_1$ - $C_4$  alkyl.

5. (Original) The method of claim 1, wherein the cholinergic agonist is a compound of formula I:

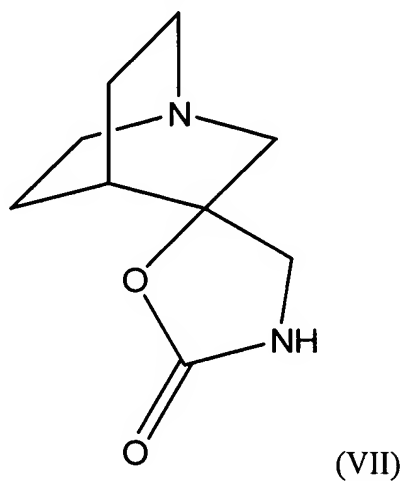


I

wherein, R represents hydrogen or methyl, and n represents 0 or 1;

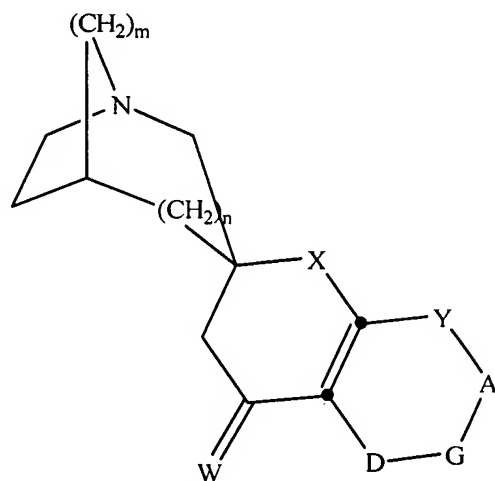
or a pharmaceutically acceptable salt thereof.

6. (Currently Amended) The method of claim 5, wherein the cholinergic agonist is (-)-spiro[1-azabicyclo[2.2.2]octane-3,5'-oxazolidin-2'-one]



or a pharmaceutically acceptable salt thereof.

7. (Original) The method of claim 1, wherein the cholinergic agonist is a compound of formula II:



wherein:

m is 1 or 2;

n is 0 or 1;

Y is CH, N or NO;

X is oxygen or sulfur;

W is oxygen, H<sub>2</sub> or F<sub>2</sub>;

A is N or C(R<sup>2</sup>);

G is N or C(R<sup>3</sup>);

D is N or C(R<sup>4</sup>);

with the proviso that no more than one of A, G and D is nitrogen but at least one of Y, A, G and D is nitrogen or NO;

R<sup>1</sup> is hydrogen or C<sub>1</sub>-C<sub>4</sub> alkyl;

R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are independently hydrogen, halogen, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>2</sub>-C<sub>4</sub> alkenyl, C<sub>2</sub>-C<sub>4</sub> alkynyl, aryl, heteroaryl, OH, OC<sub>1</sub>-C<sub>4</sub> alkyl, CO<sub>2</sub>R<sup>1</sup>, -CN, -NO<sub>2</sub>, -NR<sup>5</sup>R<sup>6</sup>, -CF<sub>3</sub> or -OSO<sub>2</sub>CF<sub>3</sub>, or R<sup>2</sup> and R<sup>3</sup>, R<sup>3</sup> and R<sup>4</sup>, respectively, may together form another six membered aromatic or heteroaromatic ring sharing A and G, or G and D, respectively, containing between zero and two nitrogen atoms, and substituted with one to two of the following substituents: independently hydrogen, halogen, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>2</sub>-C<sub>4</sub> alkenyl, C<sub>2</sub>-C<sub>4</sub> alkynyl, aryl, heteroaryl, OH, OC<sub>1</sub>-C<sub>4</sub> alkyl, CO<sub>2</sub>R<sup>1</sup>, -CN, -NO<sub>2</sub>, -NR<sup>5</sup>R<sup>6</sup>, -CF<sub>3</sub> or -OSO<sub>2</sub>CF<sub>3</sub>;

R<sup>5</sup> and R<sup>6</sup> are independently hydrogen, C<sub>1</sub>-C<sub>4</sub> alkyl, C(O)R<sup>7</sup>, C(O)NHR<sup>8</sup>, C(O)OR<sup>9</sup>, SO<sub>2</sub>R<sup>10</sup> or may together be (CH<sub>2</sub>)<sub>j</sub>Q(CH<sub>2</sub>)<sub>k</sub> where Q is O, S, NR<sup>11</sup>, or a bond;

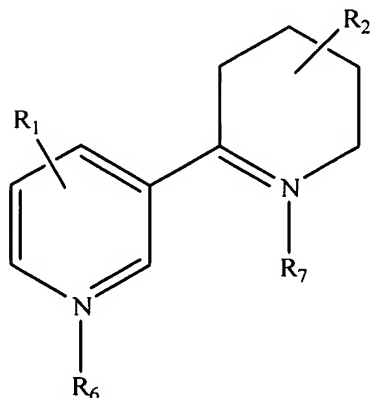
j is 2 to 7;

k is 0 to 2;

R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup> and R<sup>11</sup> are independently C<sub>1</sub>-C<sub>4</sub> alkyl, aryl, or heteroaryl, or an enantiomer thereof, or a pharmaceutically acceptable salts thereof.

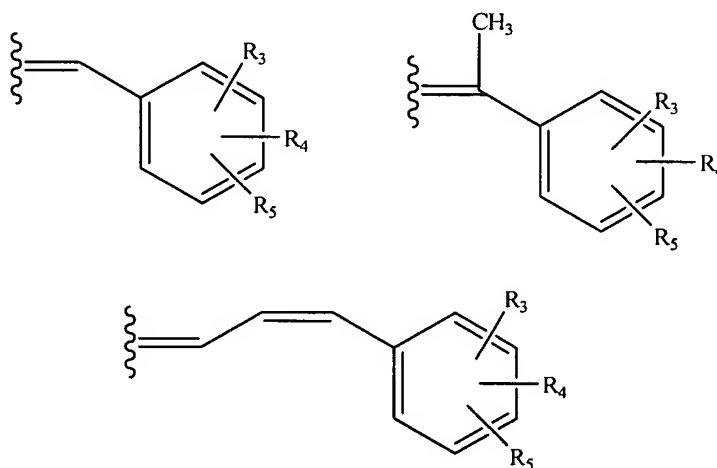
8. (Original) The method of claim 7, wherein the cholinergic agonist is a compound of formula II wherein m is 1; n is 0; p is 0; x is oxygen; A is C(R<sup>2</sup>); G is C(R<sup>3</sup>); and D is C(R<sup>4</sup>).

9. (Currently Amended) The method of claim 7, wherein the cholinergic agonist is 5'-phenylspiro[1-azabicyclo[2.2.2]octane-3,2'-(3'H)-furo[2,3-b]pyridin], or a pharmaceutically acceptable salt thereof.
10. (Currently Amended) The method of claim 1, wherein the cholinergic agonist is a compound of formula III:



(III)

or a pharmaceutically acceptable salt thereof, wherein R<sub>1</sub>, R<sub>6</sub> and R<sub>7</sub> are hydrogen or C<sub>1</sub>-C<sub>4</sub> alkyl; and R<sub>2</sub> is selected from a group of

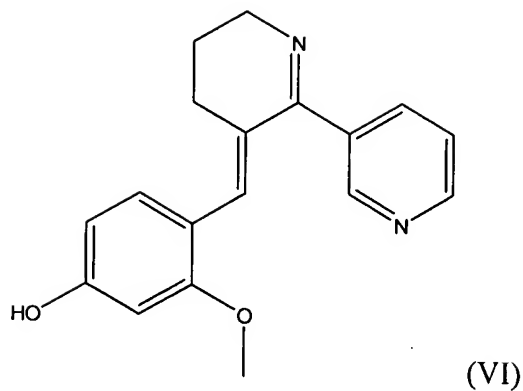


and wherein, R<sub>3</sub>, R<sub>4</sub> and R<sub>5</sub> are selected from the group consisting of hydrogen, C<sub>1</sub>-C<sub>4</sub> alkyl optionally substituted with N,N-dialkylamino having 1 to 4 carbons in each of the alkyls, C<sub>1</sub>-C<sub>6</sub> alkoxy optionally substituted with N,N-dialkylamino having 1 to 4 carbons in each of the alkyls, carboalkoxy having 1 to 4 carbons in the alkoxy, amino, amido

having 1 to 4 carbons in the acyl, cyano, and N,N-dialkylamino having 1 to 4 carbons in each of the alkyls, halo, hydroxyl or nitro.

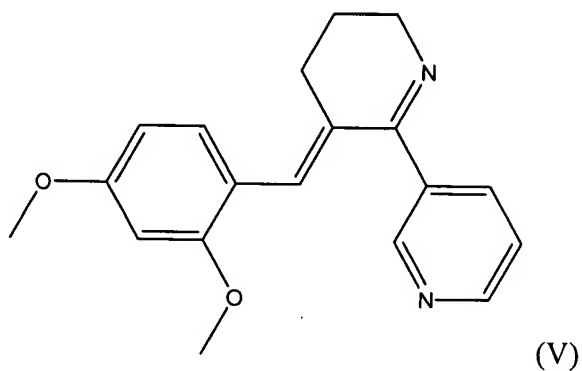
11. (Original) The method of claim 10, wherein the cholinergic agonist is a compound of formula III, wherein R<sub>2</sub> is attached to the 3-position of the tetrahydropyridine ring, and further wherein R<sub>3</sub>, which is attached to the 4- or the 2- position of the phenyl ring, is selected from the group consisting of amino, hydroxyl, chloro, cyano, dimethylamino, methyl, methoxy, acetylamino, acetoxy, and nitro.
12. (Original) The method of claim 10, wherein the cholinergic agonist is a compound selected from the group consisting of formula III, wherein R<sub>3</sub> is hydroxyl, and wherein R<sub>1</sub>, R<sub>4</sub>, and R<sub>5</sub> are hydrogen; formula III, wherein R<sub>3</sub> is acetylamino and wherein R<sub>1</sub>, R<sub>4</sub>, and R<sub>5</sub> are hydrogen; formula III, wherein R<sub>3</sub> is acetoxy and wherein R<sub>1</sub>, R<sub>4</sub>, and R<sub>5</sub> are hydrogen; formula III, wherein R<sub>3</sub> is methoxy, and wherein R<sub>1</sub>, R<sub>4</sub>, and R<sub>5</sub> are hydrogen; formula III, wherein R<sub>3</sub> is methoxy and wherein R<sub>1</sub> and R<sub>4</sub> are hydrogen, and further wherein R<sub>3</sub> is attached to the 2-position of the phenyl ring, and R<sub>5</sub>, which is attached to the 4-position of the phenyl ring, is methoxy or hydroxy.
13. (Currently Amended) The method of claim 10, wherein the cholinergic agonist is selected from the group consisting of 3-2,4-dimethoxybenzylidene anabaseine (DMXB-A), 3-(4-hydroxybenzylidene)anabaseine, 3-(4-methoxybenzylidene)anabaseine, 3-(4-aminobenzylidene)anabaseine, 3-(4-hydroxy-2-methoxybenzylidene)anabaseine, 3-(4-methoxy-2-hydroxybenzylidene)anabaseine, trans-3-cinnamylidene anabaseine, trans-3-(2-methoxy-cinnamylidene)anabaseine and trans-3-(4-methoxycinnamylidene)anabaseine or a pharmaceutically acceptable salt of any of the foregoing.
14. (Currently Amended) The method of claim 10, wherein the cholinergic agonist is 3-(4-hydroxy-2-methoxybenzylidene)anabaseine





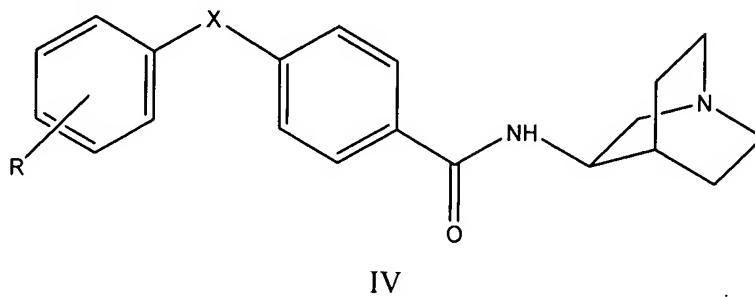
or a pharmaceutically acceptable salt thereof.

15. (Currently Amended) The method of claim 10, wherein the cholinergic agonist is 3-(2,4-dimethoxybenzylidene)anabaseine.



or a pharmaceutically acceptable salt thereof.

16. (Currently Amended) The method of claim 1, wherein the cholinergic agonist is a compound of formula IV:



or a pharmaceutically acceptable salt thereof, wherein X is O or S; and R is selected from the group consisting of H, OR<sub>1</sub>, NHC(O)R<sub>1</sub>, and a halogen, wherein R<sub>1</sub> is a C<sub>1</sub>-C<sub>4</sub> alkyl.

17. (Currently Amended) The method of claim 15, wherein the cholinergic agonist is selected from a group consisting of N-[(3R)-1-azabicyclo[2.2.2]oct-3-yl]-4-(4-hydroxyphenoxy)benzamide, N-[(3R)-1-azabicyclo[2.2.2]oct-3-yl]-4-(4-acetamidophenoxy)benzamide, N-[(3R)-1-azabicyclo[2.2.2]oct-3-yl]-4-(phenylsulfanyl)benzamide, and N-[(3R)-1-azabicyclo[2.2.2]oct-3-yl]-4-(3-chlorophenylsulphonyl)benzamide, or a pharmaceutically acceptable salt of any of the foregoing.
18. (Currently Amended) The method of claim 15, wherein the cholinergic agonist is N-[(3R)-1-azabicyclo[2.2.2]oct-3-yl]-4-(phenylsulfanyl)benzamide, or a pharmaceutically acceptable salt thereof.
19. (Original) The method of claim 1, wherein the cholinergic agonist is cocaine methiodide.
- 20-23. (Cancelled)
24. (Original) The method of claim 1, wherein the condition is sepsis.
- 25-55. (Cancelled)